Amendments to the Claims:

1. (Currently Amended) A method of operating a transmitting device including a plurality of transmitter antennas, that can communicate using a plurality of propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device, said method comprising:

receiving a binary stream assembled into groups of bits forming symbol indices;

generating at least one complex symbol value in response to a reception of the binary stream, each complex symbol value of the at least one complex symbol value being normalized ~~over one or more~~ by a function based on at least one channel coefficient ~~coefficients~~ associated with each of the ~~one or more~~ plurality of propagation channels; and

transmitting the at least one complex symbol value from the plurality of transmitter antennas.

2. (Currently Amended) The method according to claim 1, ~~A method of operating a transmitting device including a plurality of transmitter antennas, that can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device, the method comprising:~~

~~receiving a binary stream assembled into groups of bits forming symbol indices; and~~

~~generating at least one complex symbol value in response to a reception of the binary stream, each complex symbol value of the at least one complex symbol value being normalized over one or more channel coefficients associated with the one or more propagation channels ,~~ wherein the at least one complex symbol value is generated according to:

$$x_m = \frac{\sqrt{E_s}\,(h_{i,m}^*)}{\sum_{j=0}^{M_T-1} \left|h_{i,j}\right|^2} s_J \qquad m = 0,1,\cdots,M_T-1$$

where x_m is the at least one complex symbol value,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where m is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where $\sqrt{E_S}$ is a value proportional to a voltage that is normalized by the formula,

where $h_{x,y}$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

where h^* is a complex conjugate of h, and

where M_T is a quantity of the plurality of transmitter antennas.

3. (Currently Amended) The method according to claim 1, ~~A method of operating a transmitting device including a plurality of transmitter antennas, that can communicate using a plurality of propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device, the method comprising:~~

~~receiving a binary stream assembled into groups of bits forming symbol indices; and~~

~~generating at least one complex symbol value in response to a reception of the binary stream, each complex symbol value of the at least one complex symbol value being normalized over one or more channel coefficients associated with the plurality of propagation channels ,~~ wherein the at least one complex symbol value is generated according to:

$$X_j[k] = \frac{\sqrt{E_s}(H^*_{i,j}[k])}{\sum_{m=0}^{M_T-1} \left|H_{i,m}[k]\right|^2} s_J[k] \qquad k = 0,1,\cdots,N-1;\ j = 0,1,\cdots,M_T-1$$

where $X_j[k]$ is the at least one complex symbol value,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where m is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where k is an index of OFDM sub-channels connecting a j-th transmitter antenna to an i-th receiver antenna,

where $\sqrt{E_S}$ is a value proportional to a voltage that is normalized by the formula,

where $H_{x,y}[k]$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

where H^* is the complex conjugate of H,

where N is the quantity of OFDM channels, and

where M_T is the quantity of the plurality of transmitter antennas.

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4. (Previously Presented) The method of claim 1, further comprising:

selecting a first receiver antenna of the plurality of receiver antennas as a function of a metric proportional to an average injection power corresponding to the first receiver antenna.

5. (Previously presented) The method of claim 1, further comprising:

selecting a first receiver antenna of the plurality of receiver antennas as a function of a vector norm corresponding to the first receiver antenna; and

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6. (Currently Amended) A transmitting device, comprising:

a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between said plurality of transmitter antennas and a plurality of receiver antennas of a receiving device; and

a transmitter operable to generate at least one complex symbol value in response to a reception of a binary stream assembled into groups of bits forming symbol indices, each complex symbol value of the at least one complex symbol value being normalized ~~over one or more~~ by a function based on at least one channel ~~coefficients~~ coefficient associated with each of said plurality of propagation channels.

7. (Currently Amended) The method according to claim 6, ~~A transmitting device, comprising:~~

~~a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antenna of a receiving device; and~~

~~a transmitter operable to generate at least one complex symbol value in response to a reception of a binary stream assembled into groups of bits forming symbol indices, each complex symbol value of the at least one complex symbol value being normalized over one or more channel coefficients associated with the one or more propagation channels ,~~ wherein said transmitter generates the at least one complex symbol value according to:

$$x_m = \frac{\sqrt{E_s}(h^*_{i,m})}{\sum_{j=0}^{M_T-1} \left|h_{i,j}\right|^2} s_J \quad m = 0, 1, \cdots, M_T - 1$$

where x_m is the at least one complex symbol value,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where m is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where $\sqrt{E_S}$ is a value proportional to a voltage that is normalized by the formula,

where $h_{x,y}$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

where h^* is a complex conjugate of h, and

where M_T is a quantity of the plurality of transmitter antennas.

8. (Currently Amended) The method according to claim 6,~~A transmitting device, comprising:~~

~~a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device; and~~

~~a transmitter operable to generate at least one complex symbol value in response to a reception of a binary stream assembled into groups of bits forming symbol indices, each complex symbol value of the at least one complex symbol value being normalized over one or more channel coefficients associated with the one or more propagation channels ,~~wherein said transmitter generates the at least one complex symbol value according to:

$$X_j[k] = \frac{\sqrt{E_s}(H^*_{i,j}[k])}{\sum_{m=0}^{M_T-1} \left|H_{i,m}[k]\right|^2} s_j[k] \qquad k = 0,1,\cdots,N-1;\ j = 0,1,\cdots,M_T-1$$

where $X_j[k]$ is the at least one complex symbol value,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where m is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where k is an index of OFDM sub-channels connecting a j-th transmitter antenna to an i-th receiver antenna,

where $\sqrt{E_S}$ is a value proportional to a voltage that is normalized by the formula,

where $H_{x,y}[k]$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

where H^* is the complex conjugate of H,

where N is the quantity of OFDM channels, and

where M_T is the quantity of the plurality of transmitter antennas.

9. (Previously Presented) The transmitting device of claim 6, wherein:

said transmitter is further operable to select a first receiver antenna of said plurality of receiver antennas as a function of a metric proportional to an average injection power of corresponding to said first receiver antenna; and

said plurality of transmitting antennas are operable to transmit the at least one complex symbol value to said first receiver antenna.

10. (Previously Presented) The transmitting device of claim 6, further comprising:

a receiver operable to select a first receiver antenna of said plurality of receiver antennas as a function of a metric proportional to an average injection power corresponding to said first receiver antenna,

wherein said plurality of transmitting antennas are operable to transmit the at least one complex symbol value to said first receiver antenna.

11. (Previously Presented) The transmitting device of claim 6, wherein:

said transmitter is further operable to select a first receiver antenna of said plurality of receiver antennas as a function of a vector norm corresponding to said first receiver antenna; and

said plurality of transmitter antennas are operable to transmit the at least one complex symbol value to said first receiver antenna.

12. (Previously Presented) The transmitting device of claim 6, further comprising:

a receiver operable to select a first receiver antenna of said plurality of receiver antennas as a function of a vector norm corresponding to said first receiver antenna,

wherein said plurality of transmitting antennas are operable to transmit the at least one complex symbol value to said first receiver antenna.

13. (Currently Amended) A method of operating a transmitting device including a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device, said method comprising:

computing a metric <u>for one of the plurality of transmitter antennas, wherein the metric is </u>proportional to an average injection power <u>that would be used</u> for each receiver antenna of the plurality of receiver antennas of the receiving

device, wherein the metric is based on measured, complex channel coefficients associated with those of the one or more propagation channels that are between the transmitter antenna and the receiving antennas;

selecting a first antenna of the plurality of receiver antennas of the receiving device having a smallest average injection power to receive at least one complex value symbol from the ~~plurality of~~ transmitter antennas.

14. (Currently Amended) The method according to claim 13,~~A method of operating a transmitting device including a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device, the method comprising:~~

~~computing a metric proportional to an average injection power for each receiver antenna of the plurality of receiver antennas of the receiving device;~~

~~selecting a first antenna of the plurality of receiver antennas of the receiving device having a smallest average injection power to receive at least one complex value symbol from the plurality of transmitter antennas ,~~ wherein all computations of the metric proportional to the average injection power are according to:

$$AIP_i = \frac{1}{\sum_{j=0}^{M_T-1} \left| h_{i,j} \right|^2}$$

where AIP_i is the average injection power,

where i is an index of a selected receiver antenna,

where j is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where $h_{x,y}$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

and where M_T is a quantity of the plurality of transmitter antennas.

15. (Currently Amended) The method according to claim 13,~~A method of operating a transmitting device including a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels~~

~~between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device, the method comprising:~~

~~computing a metric proportional to an average injection power for each receiver antenna of the plurality of receiver antennas of the receiving device;~~

~~selecting a first antenna of the plurality of receiver antennas of the receiving device having a smallest average injection power to receive at least one complex value symbol from the plurality of transmitter antennas ,~~ wherein all computations of the metric proportional to the average injection power are according to:

$$AIP_i = \sum_{k=0}^{N-1} \left(\frac{1}{\sum_{j=0}^{M_T-1} \left| H_{i,j}[k] \right|^2} \right)$$

where AIP_j is the average injection power,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where j is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where k is an index of OFDM sub-channels connecting a j-th transmitter antenna to an i-th receiver antenna,

where $H_{x,y}[k]$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

where N is the quantity of the OFDM sub-channels, and

where M_T is the quantity of the plurality of transmitter antennas.

16. (Currently Amended) A method of operating a transmitting device including a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device, said method comprising:

computing a vector norm for each particular receiver antenna of the plurality of receiver antennas of the receiving device based on a vector comprising measured, complex channel coefficients associated with the one or more propagation channels that include the particular antenna;

selecting a first antenna of the plurality of receiver antennas of the receiving device having a largest vector norm to receive at least one complex value symbol from the plurality of transmitter antennas.

17. (Previously Presented) The method of claim 16, wherein all computations of the vector norm are according to:

$$VN_i = \sum_{j=0}^{M_T-1} \left|h_{i,j}\right|^2 = \|\mathbf{h}_\mathbf{i}\|_2^2$$

where VN_i is the vector normal of one of the plurality of receiver antennas,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where j is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where $h_{x,y}$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y, and

where M_T is the quantity of the plurality of transmitter antennas.

18. (Currently Amended) <u>The method according to claim 16,</u>~~A method of operating a transmitting device including a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device, the method comprising:~~

~~computing a vector norm for each receiver antenna of the plurality of receiver antennas of the receiving device;~~

~~selecting a first antenna of the plurality of receiver antennas of the receiving device having a largest vector norm to receive at least one complex value symbol from the plurality of transmitter antennas ,~~ wherein all computations of the vector norm are according to:

$$VN_i = \sum_{k=0}^{N-1}\left(\sum_{j=0}^{M_T-1} \left|H_{i,j}[k]\right|^2\right) = \sum_{k=0}^{N-1} \|\mathbf{H}_\mathbf{i}[k]\|_2^2$$

where VN_i is the vector norm of one of the plurality of receiving antennas,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where j is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where k is an index of OFDM sub-channels connecting a j-th transmitter antenna to an i-th receiver antenna,

where $H_{x,y}[k]$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

where N is the quantity of the OFDM sub-channels, and

where M_T is the quantity of the plurality of transmitter antennas.

19. (Currently Amended) A transmitting device, comprising:

a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between said plurality of transmitter antennas and a plurality of one or more receiver antennas of a receiving device; and

a module operable to compute a metric for one of the plurality of transmitter antennas, wherein the metric is proportional to an average injection power that would be used for each receiver antenna of said plurality of receiver antennas of the receiving device, wherein the metric is based on measured, complex channel coefficients associated with those of the one or more propagation channels that are between the transmitter antenna and the receiving antennas, and wherein said module is further operable to select a first antenna of said plurality of receiver antennas of the receiving device having a smallest average injection power to receive at least one complex value symbol from said plurality of transmitter antennas.

20. (Currently Amended) The method according to claim 19,~~A transmitting device, comprising:~~

~~a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device; and~~

~~a module operable to compute a metric proportional to an average injection power for each receiver antenna of the plurality of receiver antennas of the receiving device, the module further operable to select a first antenna of the plurality of receiver antennas of the receiving device having a smallest average injection power to receive at least one complex value symbol from the plurality of transmitter antennas ,~~ wherein said module performs all computations of the metric proportional to the average injection power according to:

$$AIP_i = \frac{1}{\sum_{j=0}^{M_T-1} \left| h_{i,j} \right|^2}$$

where AIP_i is the average injection power,

where i is an index of a selected receiver antenna,

where j is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where $h_{x,y}$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

and where M_T is a quantity of the plurality of transmitter antennas.

21. (Currently Amended) The method according to claim 19,~~A transmitting device, comprising:~~

~~a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device; and~~

~~a module operable to compute a metric proportional to an average injection power for each receiver antenna of the plurality of receiver antennas of the receiving device, the module further operable to select a first antenna of the plurality of receiver antennas of the receiving device having a smallest average injection power to receive at least one complex value symbol from the plurality of transmitter antennas ,~~wherein said module performs all computations of the metric proportional to the average injection power according to:

$$AIP_i = \sum_{k=0}^{N-1} \left(\frac{1}{\sum_{j=0}^{M_T-1} \left| H_{i,j}[k] \right|^2} \right)$$

where AIP_j is the average injection power,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where j is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where k is an index of OFDM sub-channels connecting a j-th transmitter antenna to an i-th receiver antenna,

where $H_{x,y}[k]$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

where N is the quantity of the OFDM sub-channels, and

where M_T is the quantity of the plurality of transmitter antennas.

22. (Currently Amended) A transmitting device, comprising:

a plurality of transmitter antennas, wherein the transmitting device can communicate using one or more propagation channels between said plurality of transmitter antennas and a plurality of receiver antennas of a receiving device; and

a module operable to compute a vector norm for each particular receiver antenna of said plurality of receiver antennas of the receiving device based on a vector comprising measured, complex channel coefficients associated with the one or more propagation channels that include the particular antenna, said module further operable to select a first antenna of said plurality of receiver antennas having a largest vector norm to receive at least one complex value symbol from said plurality of transmitter antennas.

23. (Previously Presented) The transmitting device of claim 22, wherein said module performs all computations of the vector norm according to:

$$VN_i = \sum_{j=0}^{M_T-1} \left|h_{i,j}\right|^2 = \left\|\mathbf{h_i}\right\|_2^2$$

where VN_i is the vector normal of one of the plurality of receiver antennas,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where j is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where $h_{x,y}$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y, and

where M_T is the quantity of the plurality of transmitter antennas.

24. (Currently Amended) The method according to claim 22.~~A transmitting device, comprising:~~

~~a plurality of transmitter antennas;~~

~~a plurality of receiver antennas, wherein the transmitting device can communicate using one or more propagation channels between the plurality of transmitter antennas and a plurality of receiver antennas of a receiving device; and~~

~~a module operable to compute a vector norm for each receiver antenna of the plurality of receiver antennas of the receiving device, the module further operable to select a first antenna of the plurality of receiver antennas having a largest vector norm to receive at least one complex value symbol from the plurality of~~

~~transmitter antennas ,~~ wherein said module performs all computations of the vector norm according to:

$$VN_i = \sum_{k=0}^{N-1}\left(\sum_{j=0}^{M_T-1}\left|H_{i,j}[k]\right|^2\right) = \sum_{k=0}^{N-1}\left\|\mathbf{H}_{\mathbf{i}}[k]\right\|_2^2$$

where VN_i is the vector norm of one of the plurality of receiving antennas,

where i is an index of a selected receiver antenna to receive the at least one complex symbol value,

where j is an index of a selected transmitter antenna to transmit the at least one complex symbol value,

where k is an index of OFDM sub-channels connecting a j-th transmitter antenna to an i-th receiver antenna,

where $H_{x,y}[k]$ is a measured complex channel coefficient of the propagation channel between receiver antenna x and transmitter antenna y,

where N is the quantity of the OFDM sub-channels, and

where M_T is the quantity of the plurality of transmitter antennas.